

## REMARKS

**[01]** Claim 1 has been amended to better define the invention. No new matter has been added. Although this amendment renders the rejections of Claims 1-8 technically moot, the rejections are treated as though there were applied to amended Claims 1-8 to advance prosecution on the merits.

### **[02]** Obviousness Rejections

**[03]** The present Office Action rejects all claims as obvious in view of a combination of U.S. Patent 6,282,538 to Woods, "Woods" herein, and U.S. Patent No. 5,724,567 to Rose et al., "Rose" herein. In addition, all claims are rejected as obvious in view of a combination of U.S. Patent No. 6,387,212 to Biffar, "Biffar" herein, and Rose. Both sets of rejections are traversed.

### **[04]** Two Uses for Prioritization

**[05]** Returning to the dichotomy established in the last response, there are two ways in which prioritization can be used in the context of a database query: 1) to determine what items to return; and 2) to determine the order in which returned items are presented. Biffar and Rose relate only to the former, while Woods and the present application relate to the latter.

**[06]** Unlike Biffar and Rose, Woods clearly teaches a method of prioritizing items to determine display order. Thus, in the abstract, Woods describes "providing the user with a priority organized query hit list." Woods, Figures 4 and 5 show a step 540 "Display (store) ranked list of query bits."

**[07]** Rose teaches prioritization to determine which items are relevant and which items are irrelevant. Rose then teaches

returning only relevant items in response to a search query. Rose does not discuss how the returned items are to be displayed. Thus, Rose relates solely to using prioritization to determine which items to return.

**[08]** Biffar teaches prioritization to determine which one item to return in response to a search query. Since a single item cannot be prioritized, Biffar relates solely to using prioritization to determine which item to return.

**[09]** Biffar and Rose

**[10]** Item 5 of the most-recent Office Action rejects the claims as obvious in view of Biffar and Rose. Both Biffar and Rose teach prioritization for determining what items to return; neither Biffar nor Rose teaches prioritization for determining the order in which returned items are displayed. Therefore, combining Biffar and Rose does not teach an order in which returned items are displayed as required by the present invention. Therefore, combining Biffar and Rose cannot render the present invention obvious.

**[11]** Woods and Rose

**[12]** Item 3 of the most-recent Office Action rejects the claims as obvious in view of Woods and Rose. Rose teaches the use of its prioritization scheme to determine which items are relevant and therefore should be returned, while Woods teaches the use of its prioritization scheme to determine the order in which the items that are returned are displayed. It would therefore be obvious to modify Woods in accordance with the teachings of Rose so that only relevant items are returned to be prioritized in accordance with the teachings of Woods.

**[13]** In the modified database query method, user interest is a factor in determining which items are returned (in accordance with the teachings of Rose. However, the order in which items are displayed is determined by the teachings of Woods. The issue is whether Woods teaches the use of user interest in determining the order in which items are returned.

**[14]** Woods prioritizes returned items by combining (at step 510) seven types of penalties, determined at steps 430-490. So each of these penalties must be considered to determine whether user indications of interest are considered.

**[15]** Morphological Variation Penalty 430

**[16]** Woods applies a morphological variation penalty at step 430 in Woods, Fig. 4. This penalty is discussed as “Procedure 3” at Woods, Col. 6, lines 35-40. In Woods, the search method allows morphological variations (e.g., “changing” is a morphological variation of “change”) of hit terms, but a penalty is assigned to returned items relying on the morphological variation. This penalty relates solely to the query text and is independent of interest indications by relatively similar users.

**[17]** Taxonomic Specialization Penalty 440

**[18]** Woods applies a taxonomic specialization penalty at step 440, which is described as “Procedure 4” at Woods Col. 6, lines 41-48. Woods search method permits taxonomic variations (e.g., “dog” can be a hit for “mammal”), but penalizes a hit relying on a taxonomic variation. This penalty relates solely to query text and is independent of interest indications by relatively similar users.

**[19] Semantic Entailment Penalty 450**

**[20]** Woods applies semantic entailment penalties at step 450, which is described as “Procedure 5” at Woods, Col. 6, lines 49-54. Woods search method permits semantic substitutions (e.g., “alter” can be consider a hit for a query term “influence”), but penalizes a hit relying on semantic entailment. This penalty relates solely to query text and is independent of interest indications by relatively similar users.

**[21] Missing Term Penalty 460**

**[22]** Woods applies missing term penalties at step 460, which is described as “Procesure 6” at Woods, Col. 6, lines 55-63. Woods search method returns hits in which not all query terms are matched, but penalizes passage which rely on incomplete matches. This penalty relates solely to query text and is independent of interest indications by relatively similar users.

**[23] Proximity Ranking Penalty 470**

**[24]** Woods applies proximity ranking penalties at step 470, which is described as “Procedure 1” at Woods, Col. 6, lines 13-19. A penalty is applied to returned passages in which search terms are found far apart. This penalty relates solely to query text and is independent of interest indications by relatively similar users.

**[25] Permutation Penalties 480**

**[26]** Woods applies permutation penalties at step 480, which is described as “Procedure 2” at Woods, Col. 6, lines 29-34. A penalty is applied to returned passages in which search terms are found in an order different from their order in the query. This penalty relates solely to query text and is independent of interest indications by relatively similar users.

**[27] Internal Boundary Penalty 490**

**[28]** Woods applies internal boundary penalties at step 490. Applicant cannot find a description of this penalty. Accordingly, there does not appear to be a teaching that this penalty involves interest indications by relatively similar users.


**[29] Woods and Rose**

**[30]** By combining Woods and Rose, one arrives at a query method in which Rose teachings are used to determine which items are returned as relevant in response to query, and in which Woods teachings are used to prioritize the returned items as displayed to the user. As shown above, Woods does not take interest indications by similar users into account in prioritizing returned items for display. Accordingly, the proposed modification of Woods in accordance with the teachings of Rose does not result in the present invention. Accordingly, the present invention is not obvious in view of a combination of Woods and Rose.

**[31] CONCLUSION**

**[32]** The new grounds of rejection based on a combination of Woods and Rose are more pertinent than the previous grounds of rejection (including the still-maintained rejection based on Biffar and Rose). Nonetheless, the proposed modification of Woods in accordance with the teachings of Rose still does not meet the requirements of the present invention as defined in the claims. Accordingly, Applicant respectfully requests allowance of the application in its current form.

Respectfully submitted

  
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